Biochemical composition and antimicrobial activity of thyme incorporate food products

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An aromatic herb in the mint family, thyme grows to a height of fifteen inches with small rounded leaves and pink flowers on woody stems. Thyme is also a good source of iron, phosphorous, potassium, zinc and manganese. Thyme leaves were collected from Kodaikanal hill area. The collected fresh thyme leaves were washed and the immature parts removed. After that the leaves were shadow dried at 27-37°C and the leaves were made into powder by using mixture grinder. Micro and macro nutrients such as carbohydrate, protein, fat, calcium, phosphorus, iron and crude fiber of thyme powder were estimated and thyme powder was found to be rich in iron, phosphorous, small amount of carbohydrate and moderate amount of fat content. Phytonutrients such as beta carotene, phenol and polyphenol were estimated by quantitative method. The thyme leaf powder was subjected to antimicrobial analysis by using disc diffusion method. The tested microorganisms were Staphylococcus aureus and E.coli. The sensory evaluation was done by a panel of twenty expert using A 5 point hedonic scale. Five recipes were prepared with and without incorporation of the developed thyme leaf powder. Thyme leaf powder was incorporated in 2%, 4% and 6% level in tea, noodles, pacoda, channa masala and chilly chicken. Only 2% and 4% thyme leaf powder incorporate recipes were acceptable, because increasing the amount of up to 1% brought considerable changes in taste of recipes. This result of study encourages the incorporation of this locally available ingredients pumpkin seed in various indigenous products which might be helpful for promoting health.

Key words: Thyme, Antioxidant compound, Overall acceptability, Medicinal uses

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